

ABSTRACT OF THE DISCLOSURE

One embodiment of the invention comprises a trocar and a reducer cap that magnetically attaches to the trocar. The trocar and the cap each include a magnetic member, at least one of which is a first magnet, and the other of which is either a second magnet or a non-magnetized magnetically permeable member. Including a magnet of sufficient strength in the trocar and/or the cap will create a magnetic field that automatically holds a surgical instrument having a magnetically permeable member at its tip in axial alignment with the cap or trocar lumen. Introduction of the surgical instrument into the lumen can be further facilitated by providing the trocar or cap lumen with a funnel-shaped opening. A lumen seal can be provided by one or more compliant toroidal seal members that expand radially inwardly when compressed axially by the magnetic attraction between the cap and trocar. The alignment feature is particularly advantageous when incorporated in a mini-trocar having a lumen on the order of 1-3 mm in diameter. In that case, a trocar cap can be a small disc magnetically attracted to the trocar to cover the lumen. Magnetic aligning devices according to the invention can be used internally of a patient or transdermally. Another embodiment of the invention is an ostium plug with a lumen therethrough that can be used in tubal sterilization. The plug is permanently implanted in the patient, but a cap is coupled magnetically to the proximal end of the plug to permit reopening of the lumen when desired.